Resource Management Guide

Greene-Sullivan State Forest

Compartment 5 Tract 4

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Foresters Narrative

Location

Tract 4 of compartment 5 is found in Greene and Sullivan County, Section 31 of Stockton Township and Section 36 of Jefferson Township, T7N R7W & R8W. From Dugger take Highway 159 south to County Road 350 South and turn left. Take this road to the first stop sign on the four way bridge and turn right onto County Line Road 1600 W. Continue on this road until ends and only continues on as a horse trail. Now turn left and continue on until you reach Truck Road. You will now be at the north-eastern corner of the tract.

General Description

Tract 4 is 141.7 acres with the majority of the stand being hardwoods, but it also has an integral component of mixed pine. Hornbeam Lake resides partially in this tract along a small part of Reservoir 29. Two other moderately sized unnamed lakes reside in the south-western end of the tract along with a little over a dozen smaller lakes.

History

This tract was acquired in two parts from Central Indiana Coal Company on December 30, 1941 and on July 14, 1949. The majority of the tract was strip mined for coal prior to the state acquisition. The trees seem to have been planted around this time.

Landscape Context

The east and south borders of this tract share borders with more State Forest that rival the same forest type inside C05T01. The west boundary for the tract borders Reservoir 29. The northern boundary borders more of Reservoir 29, more State Forest and some private land.

Topography, Geology and Hydrology

The stripper hills run north to south, east to west and south-west to north-east in this tract. There are a couple of small streams in this tract. Hornbeam Lake resides partially in this tract along a small part of Reservoir 29. Two other moderately sized unnamed lakes reside in the south-western end of the tract along with a little over a dozen smaller lakes. Their total surface area is estimated to be about 12.5 acres or about 9% of the tract's total volume.

Soils

The soils in this tract are classified as strip mines. They are described as long narrow mounds of mine spoil (a mixture of soil, till, shale, sandstone and some coal) and a few open pits. Due to this soil type, the slope between the spoil hills can be very steep.

Access

This tract can be accessed at a variety of points. First, the north-eastern corner of the tract can be accessed by using either Truck Road or County Road 500 South. Apart from this there are three points of entry by horse trail: one at the eastern border, one at the south-western corner and one at the north western corner.

Boundaries

The northern boundary borders more of Reservoir 29, more State Forest and some private land. The eastern border is comprised of both Truck road and a horse trail. The entirety of the southern border is made up of a horse trail. The entire western border is comprised of Reservoir 29.

Wildlife

There is a wide variety of wildlife present in this tract. Deer and turkey sightings and signs were common. Frogs and amphibians were common. Several songbirds and woodpeckers were noted during the inventory. Signs were also present from blue jays, coyotes, beavers and raccoons.

This area is known to attract both deer and turkey hunters.

Table 1 shows how this tract compares to the Indiana Bat guidelines. With the exception of the Snags per acre \geq 19" DBH category, this tract exceeds the Indiana Bat guidelines. It can be expected that some trees die so as to meet the 1 snag \geq 19" DBH. These may also be created during TSI activities.

Description	Goal	Tract
Preferred live trees per acre ≥ 20" DBH	3	3.3
Preferred live trees per acre ≥ 11" DBH	6	12.1
Snags per acre ≥ 9" DBH	5	7.6
Snags per acre ≥ 19" DBH	1	0

TABLE 1

Communities

Most of this tract is a mix of various hardwood and pine trees. While the majority of the trees in the tract are hardwood, there is an ample supply of pines. Soft and hard mast trees can be found throughout the tract. Aquatic and riparian trees also add to the diversity of the tract. Invasives such as Japanese honeysuckle, autumn olive, Ailanthus, Japanese barberry and multiflora rose were observed during the inventory. There was also an abundance of grapevines.

Recreation

There is a great deal of public recreational opportunities in this tract. With there being two larger bodies of water with easy access to one of them (if you count the horse trail), fishing can take place in this tract. There is a horse trail that runs through this tract, as well. This site is also known to be a popular spot for hunters.

Cultural

Cultural resources may be present on the tract but their location is protected. Adverse impacts to significant cultural resources will be avoided during any management or construction projects.

Silviculture Prescription

The overall recommendation of this tract is to conduct an intermediate cutting, more specifically an improvement harvest using single tree and group selection. This harvest should take place within the next couple of years. This harvest will improve the overall vigor, quality and value of the residual stand, in part by removing the pines to transition the tract to a more hardwood forest, while capitalizing on stems dropping out due to natural mortality or maturity. Wildlife will benefit from this harvest as well. Additional sunlight penetrating the forest floor will stimulate the development of new ground flora, consequentially increasing nesting and foraging habitat. This is essential for game and non-game species as well as continued forest development.

The improvement harvest should yield approximately 550,960 board feet, if the whole tract is harvested, leaving approximately 159,150 board feet. After the harvest a TSI will increase the snags per acre while diversifying diameter distributions of both snags and growing stock trees; also, it will control grapevine and release selected crop trees not successfully released during the harvest. This stand should be re-inventoried in 2027.

Proposed Activities Listing

Proposed Management Activity	<u>Proposed Date</u>
Skid Trail / Log Yard Construction	2010 - 2011
Timber Marking	2011 - 2012
Harvest	2012 - 2014
Close Out	2013 - 2014
TSI (Post-Harvest)	2014 - 2017
Re-Inventory	2027

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